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for the Behavioral and Social Sciences**

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**The Changing U.S. Army: A Summary of Future
Focused Reports from 1990-1999**

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14. ABSTRACT (Maximum 200 words): This report briefly summarizes a review of 83 documents that focused on how the Army and its environment might be changing in the future, and what these changes could mean for leadership practice, leadership development, and other important organizational policies. The reports and presentations reviewed were prepared from 1990-1999 with the majority written over the last three years. These documents were reviewed to answer two central questions: (1) What is the Army's operating environment likely to be in the future? and (2) What do environmental changes mean for leadership practices and leader development? The review of the 83 reports indicated significant changes in six environmental sectors: geopolitical, technological, economic, socio-cultural, and demographic. The results of the review are organized around four topics: (1) leadership performance requirements resulting from changes in the Army's operating environment; (2) the leader attributes that contribute to leader effectiveness; (3) the assessment and selection of Army officers; and (4) the training and development of officers. The resulting summary was prepared in the form of a briefing to be presented to senior decision makers. This report includes the summary, list of reports reviewed, and briefing slides.					
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Research Report 1747

The Changing U.S. Army: A Summary of Future Focused Reports from 1990-1999

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FOREWORD

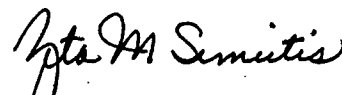
The Army must develop leaders who can effectively apply the four core dimensions of leadership: values, attributes, skills, and actions. These provide the basis for leader development policy, doctrine, training, and research. To assist the Deputy Chief of Staff for Personnel (DCSPER) as the proponent for leadership and leader development policy, researchers at the George Mason University (GMU) scoured the relevant publications between 1990 and 1999 for papers that dealt with the changing Army and reviewed 83 documents in detail.

This report summarizes the findings of a review of recent research on how the Army and its environment might be changing in the future. Researchers at GMU identified papers that dealt with two central questions: (1) What is the Army's operating environment likely to be in the future? And (2) What do environmental changes mean for leadership practices and leader development?

The review of these documents indicated significant changes in six environmental sectors: geopolitical, technological, economic, socio-cultural, and demographic. The results of the review are organized around four topics: (1) leadership performance requirements resulting from changes in the Army's operating environment; (2) the leader attributes that contribute to leader effectiveness; (3) the assessment and selection of Army officers; and (4) the training and development of officers. This report includes a summary of the reports reviewed, the resulting briefing prepared for senior decision makers, and a full reference list of reports reviewed.

This research was briefed to the Leadership Action Group, chaired by BG Melton, Director, Human Resources Directorate, DCSPER.

It is hoped that this summary of research on the changing Army will help all organizations to improve current leadership research, develop new ideas about leadership, build consensus, and help improve the development of effective Army leaders.


ZITA M. SIMUTIS
Technical Director

THE CHANGING US ARMY: A SUMMARY OF FUTURE FOCUSED REPORTS FROM 1990 TO 1999.

EXECUTIVE SUMMARY

Research Requirement:

The purpose of this research was to assist the Deputy Chief of Staff for Personnel (DCSPER) as the proponent for leadership and leader development policy by reviewing recent references exploring the changing Army, and relating what these changes could mean for leadership practice, leader development, and other important organizational policies.

Procedures:

This report summarizes the findings of a review of recent research that focused on how the Army and its environment might be changing in the future. Researchers at the George Mason University (GMU) scoured the publications between 1990 and 1999 for papers that dealt with the changing Army, and reviewed 83 documents in detail. They identified papers that dealt with two central questions: (1) What is the Army's operating environment likely to be in the future? And (2) What do environmental changes mean for leadership practices and leader development?

Findings:

The review of these documents indicated significant changes in six environmental sectors: geopolitical, technological, economic, socio-cultural, and demographic. The results of the review are organized around four topics: (1) leadership performance requirements resulting from changes in the Army's operating environment; (2) the leader attributes that contribute to leader effectiveness; (3) the assessment and selection of Army officers; and (4) the training and development of officers. The report includes a briefing prepared for senior decision makers as well as a list of reports reviewed.

Utilization of Findings:

This research was briefed to the Leadership Action Group, chaired by BG Melton, Director, Human Resources Directorate, DCSPER.

THE CHANGING U.S. ARMY: A SUMMARY OF FUTURE FOCUSED REPORTS FROM
1990-1999

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The Changing U.S. Army: A Summary of Future Focused Reports from 1990-1999

Background

Today, the United States Army stands at another crossroads. Its operating environment is changing in many ways that will require far-ranging and far-reaching organizational change and strategic realignments. Improvements in weaponry and information technology have changed the nature of the future battlefield. Technological advancements have created exponential increases in the data flowing to military decision makers while new communication technologies have multiplied the number of input channels contributing to strategic and tactical decisions. The traditional warfighting mission of the Army has been greatly expanded to include an increasing number of other-than-war missions, such as peace-making, peace-keeping, humanitarian interventions, and environmental conservation and support. These operations are likely to involve mixed civilian, military, and multinational participants. The global theater for these operations and missions has changed from the bipolar contingencies of the cold war to the multifaceted dynamics of the current era. Further, the actions of the Army and its soldiers are often broadcasted through the media instantaneously for public viewing and analysis.

Unlike many organizations, the Army devotes considerable time and resources to understanding the changes occurring in its environment. Foresights gained from this effort are then used by senior decision makers to develop strategic visions and long-range policies. Recent examples of such organizational change initiatives include the Army Warfighting Experiment (AWE), Force XXI, and the Army After Next (AAN). A consistent theme in these initiatives, particularly AAN, has been the key role assigned to leaders and officers as the propagators and managers of organizational change in the Army. The success of the Army in meeting its future challenges will depend heavily upon the quality of its officers and how well they are trained to respond to their changing operational environment.

Understanding the changing roles of leaders in the Army will require a clear vision of how the operating environment is likely to change in the future. In particular, how will current and future environmental changes influence the performance requirements of future officers -- what will officers need to do to ensure that the units under their command can be effective? The answers to this question provide the basis for inferring the attributes needed by future leaders to be successful, which in turn become the focus of future training and development efforts.

The Army has recognized the importance of these questions and has devoted considerable institutional energy to their study. A review of the existing military literature completed by the authors of this report revealed 83 documents that had as their focus how the Army and its environment might be changing in the future, and what these changes could mean for leadership practice, leadership development, and other important organizational policies. These reports and presentations were prepared from 1990-1999, although the vast majority of them were written over the last 3 years. While 13 reports were submitted from 1990-1996, 35 reports were prepared in 1997 and 31 reports were completed in 1998. The remaining 4 reports were published in 1999 or are currently in press. Most of these papers were presented at conferences organized to examine strategic changes in the Army. Appendix A contains a listing of these

reports. Included in this listing are nine exemplary reports that summarize conclusions about the changing environment for the U.S. Air Force and the U.S. Navy. These reports also include discussions relevant to change in the Army. In sum, while we cannot be sure that this search is fully exhaustive (i.e., including all possible reports about the future Army), it is comprehensive.

The present report summarizes these "futures" documents in the form of a briefing to be presented to senior decision makers. It is organized around the leader performance requirements contributing to unit effectiveness, and the attributes necessary to meet these requirements. The authors reviewed the futures reports to answer two central questions:

- What is the Army's operating environment likely to be in the future?
- What do environmental changes mean for leadership practices and leader development?

This report briefly summarizes the results of this review. It is organized around four topics: (a) leadership performance requirements resulting from changes in the Army's operating environment; (b) the leader attributes that contribute to leader effectiveness; (c) the assessment and selection of Army officers, and (d) the training and development of officers. This summary is also presented in the form of a briefing in Appendix B.

In the next section of this report, we briefly summarize what has been concluded about likely changes in various sectors of the Army's operating environment. We then briefly examine the implications of these changes for leadership practices and policies.

The Changing Army Environment

The review of the futures reports indicated significant changes in six environmental sectors: geopolitical, technological, economic, socio-cultural, socio-political, and demographic. Projected geopolitical changes suggest that while the United States will likely maintain continued military dominance through power projection and a strong overseas presence, it will need to respond to a wider variety of contingency operations calling for different kinds of force capabilities. These changes will result in higher operations and personnel tempo. Many operations will be joint and multinational in scope. They will require increasing cooperation with international agencies. Further, these operations will feature a greater number of missions such as peacemaking, peacekeeping, rendering humanitarian assistance, evacuating noncombatants, providing environmental security, and fighting terrorism, drugs, and arms trafficking. Accordingly, the U.S. Army will need to possess the ability to assemble rapidly, deploy, and employ forces having very different mixes of capabilities. Further, the Army will need to perform these activities in response to multiple simultaneous missions.

Changes in weapons and information technology are transforming the battlefield of the future. New weapons technology will act as a force multiplier, with greater lethality but also with smaller force requirements. Weapons will become increasingly more precise, resulting in less collateral damage and more lopsided casualties. The Army futures reports forecast that future operations will occur around the clock, with shared real time situational awareness. The

digitization of the battlefield will increase the amount of information coming to commanders and the speed required for responses. Planning and operations will often need to occur almost simultaneously. Information technology will allow much more information to be conveyed both horizontally and vertically in command networks, and senior commanders will have increased capabilities to command anywhere in the battle space.

Information technology will also have implications for socio-cultural and socio-political factors. Many military operations are increasingly open to instant media exposure and analysis. This forces a greater focus by military planners on public opinions and expectations by civilian decision makers. There will be constant struggles to maintain perceptions of public utility, or the usefulness of military options in the service of national interests.

The Army is likely to mirror increasingly non-military organizations in their movement away from hierarchically-organized structures to ones that are flatter, more flexible, and with units that are smaller, more networked, and more cross-functional. A greater number of traditionally military activities are likely to be outsourced to civilian counterparts, raising questions about the command of such activities, particularly in wartime conditions.

The population of the Army will reflect key shifts in the labor pool, with increasing representation from minorities, women, and immigrants. Military jobs and occupations will reflect greater gender equality. Trends in the existing pool of soldier candidates suggest that future enlistees may not have the same level of abilities as previous groups, and will likely enter the military with different value sets and ethical beliefs, with a perceived erosion in traditional orientations. Further, military institutions and their civilian partners will become more culturally pluralistic. Other socio-cultural issues that will need to be addressed by the Army include requirements for military employment of disabled persons, as prompted by the American Disabilities Act, and continued controversy about homosexuals in the military.

These changes are likely to occur amid considerably buffeting from economic forces. Military budgets are likely to face continued downward pressures because of increased emphases on critical and expensive domestic issues (e.g., health care). Accordingly, downsizing pressures will continue. These combinations of factors flowing from economic forces are likely to decrease the availability of officer candidates and reduce the retention of the officer corps.

Implications for Army Leadership

Leader Performance Requirements. These environmental changes will alter the performance requirements for future officers. Leaders will need to perform in new command and control structures, where data and information is increasingly shared across different levels and functional areas. They will operate with greater situation awareness in the battlefield and will need to plan and execute operations more rapidly, almost simultaneously. Many of the performance requirements that were formerly typical of senior officers will migrate to lower command levels, while senior officers will need to operate in an information environment of even greater complexity. They will need to respond more rapidly to unanticipated threats worldwide, and they will need to make decisions at consistently faster rates.

Leaders will need to perform increasingly nontraditional missions that will require interaction and cooperation with multinational military and civilian organizations. Senior leaders will need to attend more closely to public relations and devote more energy to building consensus for overseas deployments and operations other than war.

Leaders will need to lead a more multicultural, multiracial, and diverse Army. They will need to focus more efforts on socialization of new recruits who may reflect values and beliefs from more traditional ones that have characterized the Army.

Leader Attributes. These performance requirements do not necessarily alter the basic cognitive, interpersonal, technical, and tactical competencies required of current soldiers. However, the relative mix and emphases on these competencies may change. For example, leaders will need a greater understanding of local politics and cultures as they conduct more and different kinds of military operations overseas. They will need greater knowledge of technology with a corresponding need to update this knowledge at a faster pace.

In response to the geopolitical, demographic and socio-cultural changes, future officers will need increased communications, human relations and multicultural skills. They will require more team-building and team boundary spanning skills. Complex problem solving skills will become increasingly important at lower command levels. Officers will also need attributes that foster greater cognitive and behavioral flexibility.

The complexity of the changing environment will require officers to have a greater tolerance of ambiguity and openness. Traditional attributes such as initiative, risk taking, and strong moral and ethical principles will be particularly important.

Leader Selection, Assessment, Retention, and Promotion. Future challenges, particularly socio-cultural and socio-political pressures, highlighted the need for the Army to update programs to recruit and commission higher quality officers to meet the demands of changing demographics. Specific suggestions included increasing the role of universities in providing more broadly educated and diverse leaders, as well as increased public outreach efforts. Development of "profile-matching" approaches to the selection of desired officer candidates was also suggested. Finally, more programs and systematic interventions to increase officer and enlisted retention rates were recommended.

A consistent refrain was the need for better programs to assess leader performance. For example, post battalion command assessment procedures were suggested as necessary for a comprehensive analyses of strengths and weaknesses of outgoing commanders. Such analyses would become the basis for further leader development interventions. Assessment instruments using 360 degree formats were referenced as particularly useful tools. Another suggestion was to modify assessment processes modeled after processes used to select candidates for special operational forces. Such procedures include multiple hurdles screening for determining follow-on assignments and intensive situational and performance tests.

The need to revise current promotion systems was also addressed. Some of the key suggestions offered in the futures reports were to integrate the Army human resource

management system, balance grades and skills at the Field Grade level, and provide a broader base of information to field grade selection boards. Clearly the need exists to address the anticipated flatter Army structure of the future with its accompanying impact on promotion to the ranks of general officer.

Leader Training and Development. The impact of environmental changes on the Army leader development programs highlights the need to modernize the leader development process. Changes in leader performance requirements, and the migration of certain requirements to lower command levels, suggests that training for company, battalion, and brigade command would need to be revised substantially. One proposed revision supported continued emphasis on combat training but with subsidized training focused on mission-specifics. Another suggestion was directed towards the need to develop experienced leaders and improved core capabilities. The increasingly joint nature of future operations suggests integrated training with joint systems. Training will also need to focus on the development of skills to employ and utilize new and emerging information and weapons technology.

The three pillars of Army leader development, institutional training, work assignments, and self development, will not only need to be revised in content, but also increasingly coordinated to provide a more integrated and efficient program of officer development. Given budget pressures, a greater emphasis on alternative training programs such as distance learning, self-study and internet-based self-development programs and greater use of simulations and virtual reality exercises was suggested. These programs would be augmented with mentoring and feedback systems.

Finally, a common theme among the reports was to revise Joint Professional Military Education by increasing the focus on strategic thinking, coalition warfare, and joint warfighting. Senior leaders should be prepared to interact with other stakeholders in an increasing multicultural environment, as well as with different governmental and civilian agencies.

Summary

The number and content of the 83 futures reports document the Army's interest in understanding how its operating environment may be changing over the next 25 years and how it can respond to these challenges. These efforts have also been evidenced in recent initiatives such as OPMS XXI, AAN and Strike Force. Many of the recommendations regarding leader assessment and development have resulted in preliminary research efforts. There has also been a surge in interest in researching attributes that foster leader flexibility in dynamic and complex environments. Taken together, these activities illustrate the Army's determination to maintain its strengths and values, as well as fulfill its central missions, even with dramatic changes occurring in its operating environment.

The briefing in Appendix B is by no means exhaustive of all of the conclusions offered in the 83 futures reports. Instead, it summarizes some of the most significant ones. However, the business of forecasting future trends and planning responsive strategic policy is never ending; indeed, many of the conclusions in the 83 reports may currently be outdated. We suggest that the briefing in Appendix B be presented to various stakeholders and policy makers within the Army

community to gain their insights and analysis. The briefing should then be updated accordingly.

The material in this report and corresponding briefing should serve as the catalyst for further insights as well as for the development of a database that keeps track of similar reports in the future.

APPENDIX A

Listing of Army Futures Reports

Adelman, L. (1997, November). Cognitively engineering technology for the Army After Next. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Andriole, S. (1998, June). Macrotrends in IT: Myths, realities and challenges. M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Army strategic planning guidance. (1998, October). Washington, D.C.

Aude, S. (1998, June). Division Army Warfighting Experiment (DAWE) leadership/leader development findings: Implications for the Army After Next (AAN). In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

AUSA. (1998, February). Interview with SMA Hall (NCO Notes No. 98-2). Arlington, VA: Association of the United States Army.

Bass, B. M. (1997, November). Leadership in the Army After Next. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Belenky, G. (1997, November). Warfighter biomedical assessment in sustaining individual and unit effectiveness in Army After Next operations. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Bier, G. L., Grzyb, S. W., & Stevens, M. M. (1998, June). Understanding and expanding the United States military role in humanitarian Deming operations (Landpower Essay Series No. 98-3). Arlington, VA: Association of the United States Army.

Biever, J. D. (1998, June). The relationship between organizational design and organizational effectiveness: Working paper. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Brown, F. (1997, November). Learning in Army XXI. M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Buckley, E. (1997, November). The Army After Next project: Knowledge and speed, emerging impressions. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Campbell, D. (1991, February). Strategic leadership. In Strategic leadership conference proceedings (pp. 101-127). Carlisle Barracks, PA: U. S. Army War College.

Carley, K. (1998, June). Examining adaptation and flexibility in command and control architectures. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Casmus, D. M. (1997). Organizational culture and the imperatives for implementing Joint Vision 2010 (Research Project No. 0623 305). Carlisle Barracks, PA: U. S. Army War College. (AD A326 685)

Center for Army Leadership (1998, February). Leader development: Meeting the challenges of the 21st century. (A Concept Paper, Draft No. 4). Fort Leavenworth, KS.

Center for Army Leadership (1998, April). Leader development in the 21st century. (A Concept Paper, Draft). Fort Leavenworth, KS.

Christianson, C. V. (1992). The United States Army War College: A focus on tomorrow's Army (Research Project No. 12124). Carlisle Barracks, PA: U. S. Army War College. (AD A249 760)

Cohen, M. S. (1998, June). Training battlefield critical thinking skills. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Cooke, E. F. (1998, May). Wise leadership (NCO Notes No. 98-3). Arlington, VA: Association of the United States Army.

Cupp, C. M., & Levine, P. (1996). Future directions: preparing for the 21st century Volume 3, Number 2 (Tech Rep. No. 96/6). Washington, D. C.: U. S. Department of Defense. (AD A309 242)

Davis, J. P. (1998, January). Values (NCO Notes No. 98-1). Arlington, VA: Association of the United States Army.

DeCzege, H. W. (1997, November). Battle command of 2020 and beyond. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

DeCzege, H. W. (1997, November). The human dimension of combat. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Dorn, E. (1997, January). PME: Preparing military leaders for the future (AUSA Issues No. 97-1). Arlington, VA: Association of the United States Army.

Drillings, M. (1998, June). Highlights of November 1997 AAN Workshop. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Drillings, M., Adelman, L., Manzo, A., & Shaler, M. (in press). Human and organizational issues in the Army After Next: A conference held 13-15 November 1997. Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences.

Drillings, M., Adelman, L., Manzo, A., & Shaler, M. (in press). Human and organizational issues in the Army After Next - II: A conference held 24-26 June 1998. Alexandria, VA: U. S. Army Research Institute for the Behavioral and Social Sciences.

Downes, C. (1997, November). An ethos-directed Army for the 21st century. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Downes, D. (1997, November). Developing an officer corps to lead the total Army into the 21st century: Making reality match rhetoric. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Dubik, J. M. (1996, October). Creating combat power for the 21st century (The Land Warfare Papers No. 25). Arlington, VA: Association of the United States Army.

Elder, D. (1998, June). Army core values throughout NCO history (NCO Notes No. 98-4).

Arlington, VA: Association of the United States Army.

Elder, D. K. (1998, August). Strengthening a pillar (Landpower Essay Series No. 98-5). Arlington, VA: Association of the United States Army.

Fast, B. G. (1996). Building situational awareness in Force XXI (

French, M. B. (Ed.). (1997). Army: 1997-98 Green Book. Arlington, VA: Association of the United States Army.

Frey, K. L. (1997, November). Ethical leadership: A leadership for all seasons. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Gade, P. A. (1999, April) Comparative military research: Leadership for change. [Information Paper]. Unpublished.

Galland, J. & Sanders, M. (1997, November). Small group leadership for elite units. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Gay, M. (1998, June). The Army After next: Battle force and the Army of 2025. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Guthrie, N. D. (1990). The impact of technological change on military manpower in the 21st century (Thesis No. 306 036). Monterey, CA: Naval Postgraduate School. (AD A232 472)

Hackney, J. E. (1999, April). Futures. Retrieved February, 1999 from the World Wide Web: <http://www-cgsc.army.mil/cal/aldpfut.htm>

Hager, R. S. (1997). Current and future efforts to vary the level of detail for the common operational picture (Thesis No. 0421 113). Monterey, CA: Naval Postgraduate School. (AD A341 674)

Hall, W. M. (1998, September). Thinking and planning: Vision 2010 (Landpower Essay Series No. 98-6). Arlington, VA: Association of the United States Army.

Heinemann, T. S. (1995). Full-dimension operations planning constructs: Thinking 'out of the box' for the 21st century (Monograph No. 51024 130). Fort Leavenworth, KS: U. S. Army Command and General Staff College. (AD A300 728)

Hix, W. C. (1997). The joint vision for 2010 and beyond: Evolution or revolution now? (Thesis No. 1124 085). Fort Leavenworth, KS: U. S. Army Command and General Staff College. (AD A331 733)

Hunt, J. G. (1996, March). Leadership challenges of the 21st century Army symposium. Lubbock, TX: Texas Tech University, Institute for Management and Leadership Research.

Joint Chiefs of Staff (1997). Concept for future joint operations: Expanding joint vision 2010 (Report No. 0714 039). Washington D. C.: Joint Chiefs of Staff. (AD A327 124)

Klein, G. (1997, November). Supporting skilled decision making in the Army After Next. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Kubow, L. E. (1995). Command and control in the 21st century: A construc of the future (Research Project No. 0620 092). Carlisle Barracks, PA: U. S. Army War College. (AD A295 373)

Lehner, P., & Psotka, J. (1997, November). Automated reasoning for asymmetric warfare simulations. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Leonhard, R. R. (1998, June). The principles of war for the information age. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Littlefield, T. K., Jr. (1998). The military decision process - - Overlooked by the revolution in military affairs (Research Project No. 0526 173). Carlisle Barracks, PA: U. S. Army War College. (AD A344 635)

Loftin, R. B. (1997, November). Shared virtual environments for mission planning and team training. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Maggart, L. E. (1998, June). Leadership and technology in the 21st century. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Mayer, J. D. (1998, June). What Emotional Intelligence (EQ) can tell us about selecting leaders. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Metz, S., Johnsen, W. T., Johnson, D. V., II, Kievit, J. O., Lovelace, D. C., Jr. (1996). The future of American landpower: Strategic challenges for the 21st century Army (Rep. No. 0419 091). Carlisle Barracks, PA: U. S. Army War College. (AD A307 010)

McChrystal, S. A., Gardner, J. D., & McHale, T. P. (1997). Bridging the competence gap: developing tactical leaders for the army of 2015 (Research Project No. 0818 039). Carlisle Barracks, PA: U. S. Army War College. (AD A328 200)

Miller, L. L. (1997, November). Cohesion in smaller, more diverse military. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Newcomb, C. L. (1993). Principles of future army force structure design (Research Project No. 519 047). Carlisle Barracks, PA: U. S. Army War College. (AD A264 616)

Nickerson, R. S. (1997, November). The future of educational technology in retrospect. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Odeen, P. A., Armitage, R. L., Hearney, R. D., Jeremiah, D. E., Kimmitt, R. M., Krepinevich, A. F., McCarthy, J. P., Nolan, J. E., & RisCassi, R. W. (1997, December). Transforming defense: National security in the 21st century. Washington, D. C.: National Defense Panel.

O'Neal, J. P. (1998, June). Army After Next: Quality soldiers on a world stage: The leadership challenge. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Orvis, B. R., Nichinporuk, B., McDonald, L. L., Quigley, D., & Sastry, N. (1998, June). Future personnel resource management: Initial report. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Pew, R. W. (1997, November). Human behavior modeling and simulation in support of the Army After Next. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and

organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Reimer, D. J. (1997). The annual report on the Army After Next (AAN) Project: Knowledge and Speed. Washington D. C.: U. S. Army.

Sanders, M., Rumsey, M., & Brooks, J. (1997, November). The application of Special Forces selection and assessment techniques and procedures to the Army After Next. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Segal, D. R. (1997, November). "Soldierization" for the Army After Next. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Serfaty, D. (1998, June). Adaptive architectures in future C2 organizations. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Shalikashvili, J. D. (1996). Joint Vision 2010. Washington, D. C.: Joint Chiefs of Staff.

Sherrill, E. T., & Barr, D. R. (1997). Assessing situational awareness in Task Force XXI (Tech. Rep. No. 0804 056). West Point, NY: U. S. Military Academy. (AD A 350 204)

Strong, E. (1998, June). Strategic human resources management. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Summers, H. G., Jr. (1998, February). Soldiers serve as our credentials (Defense Report No. 98-1). Arlington, VA: Association of the United States Army.

Thomas, L. E., Jr. (1998). Information warfare Force XXI situational awareness (Research Project No. 0504 163). Carlisle barracks, PA: U. S. Army War College. (AD A342 718)

Thompson, P. S. (1991). Leadership for the future battlefield (Monograph No. 403 086). Fort Leavenworth, KS: U. S. Army Command and General Staff College. (AD A233 512)

Tilford, E. H. (1997, June). National defense into the 31st century: Defining the issues. Carlisle Barracks, PA: U. S. Army War College, Strategic Studies Institute.

Tnopyr, M. L. (1997, November). The Army After Next lessons learned in American business personnel management. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Ulmer, W. F. (1997, November). Military leadership into the 21st century: A "bridge too far?" In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Vollrath, F. E. (1997, November). Human resource implications of Army After Next (AAN). In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Wagner, R. K. (1997, November). Facilitating the development of advanced performance: Implications of the study of practical intelligence. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Weisband, S. (1997, November). Developing swift trust in temporary teams: challenges for military leadership in the age of mediated communication. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Weltman, G. (1998, June). Human behavior in combat: Notes from the Army Science Board. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Whitlock, W. (1998, June). Workshop 1: Lessons learned from AWEs: Human and organizational issues for Army After Next. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Workshop 2. (1998, June). Future personnel management: Army After Next sound bites. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Workshop 3. (1998, June). Teams and organizations: Army After Next conference. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the

Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Zaccaro, S. J. (1997, November). Fostering military team adaptiveness in the Army After Next. In M. Drillings, L. Adelman, A. Manzo, & M. Shaler (Chair), Human and organizational issues in the Army After Next. Conference conducted for the Research and Advanced Concepts Office, U.S. Army Research Institute for the Behavioral and Social Sciences, Alexandria, VA.

Listing of Example Air Force and Navy Futures Reports

Air Force Center for Quality and Managment Innovation (1996). Quality Air Force in the 21st Century: Technology and Innovation (Symposium Proceedings No. 0123 001). Maxwell AFB, TX: Air Force Quality Institute. (AD A320 286)

Dallon, J. H., Johnson, J. I., & Krook, C. C. (1998). 1998 Department of the Navy posture statement. Forward from the sea: Anytime, Anywhere (Publication No. 0617 154). Washington, D. C.: Department of the Navy. (AD A346 874)

Fogleman, R. (1996, October). Strategic vision and core competencies. In Air Force Association Symposium. Symposium conducted at Los Angeles, CA.

Levine, P. (1998, August). Aerospace in the 21st century electronic bibliography. Retrieved March 3, 1999 from the World Wide Web: <http://www.dtic.mil.aerospace>.

McGinnis, M. L. (1996). Navy officer force planning for the early 21st century (Research Project No. 0724 048). Newport, RI: Naval War College. (AD A311 165)

Naval Studies Board (1993). Navy-21 update: Implications of advancing technology for naval operations in the twenty-first century (Publication No. 0410 047). Washington, D. C.: National Academy Press. (AD A306 545)

Poplar, J. R., III (1990). The future role of the surface Navy in the implementation of the national military strategy - a look to 2020 (Research Project No. 03 26 054). Carlisle Barracks, PA: U. S. Army War College. (AD A219 700)

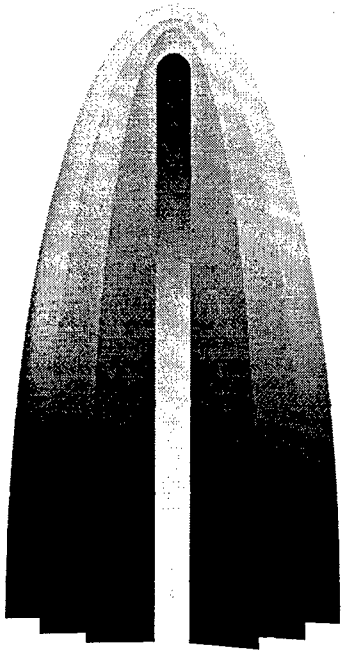
Scientific Advisory Board (1995). New world vistas: air and spacepower for the 21st century. Space technology volume (Publication No. 0618043). Washington, D. C.: U. S. Air Force. (AD A309 600)

Scientific Advisory Board (1995). New world vistas: air and spacepower for the 21st century. Summary volume (Source No. 317 900). Washington, D. C.: U. S. Air Force. (AD A321 858)

Appendix B

Briefing Slides: The Changing U.S. Army: A Summary of Future Focused Reports from 1990-1999

***THE CHANGING U.S. ARMY:
A SUMMARY OF FUTURE
FOCUSED REPORTS
FROM 1990-1999***



Steve Zaccaro, Richard Klimoski, and Lisa Boyce
George Mason University

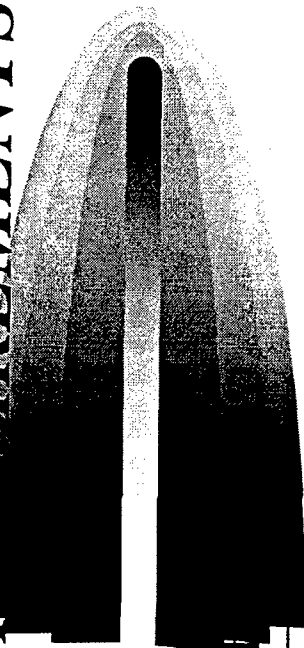
THE CHANGING U.S. ARMY:

A Summary of Reports from [REDACTED] 1999

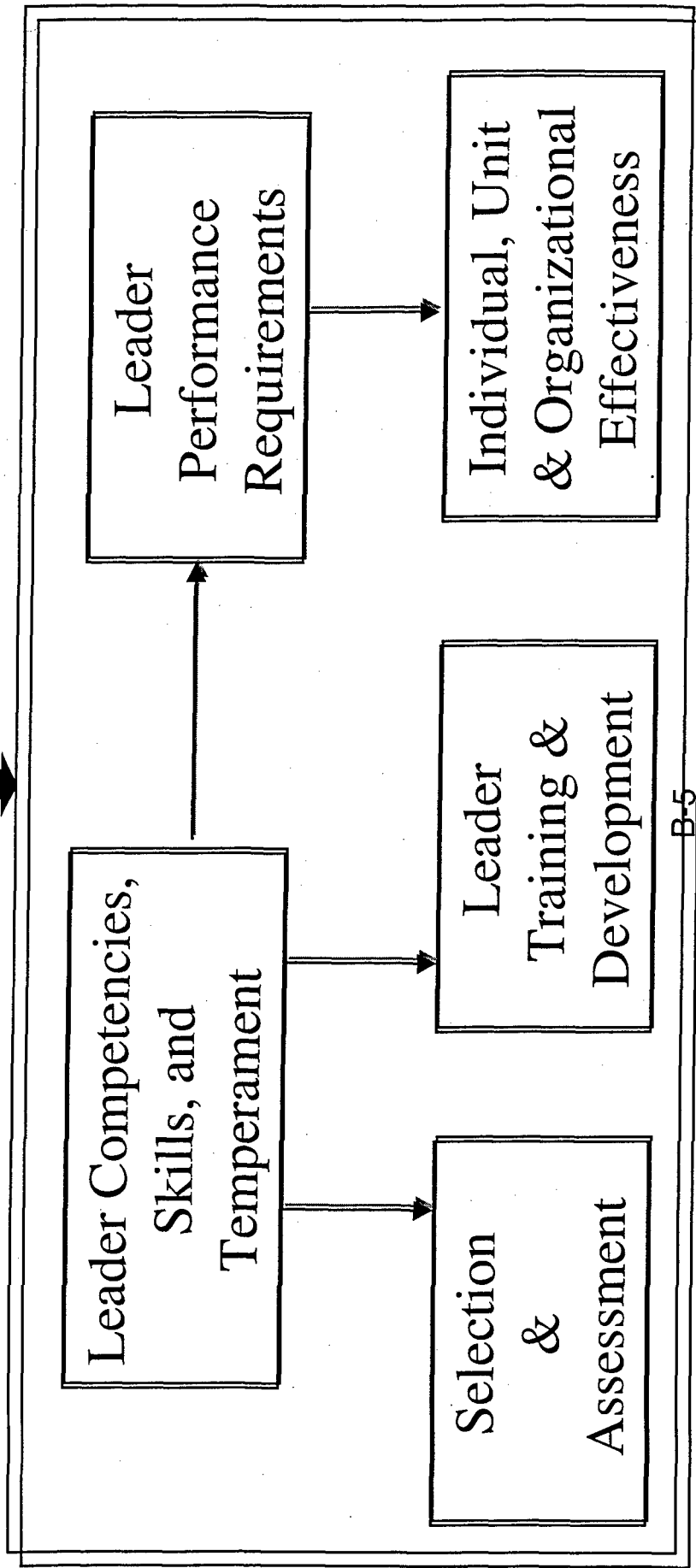
**83 Reports and Presentations Reviewed
(1990-1999)**

- What will be the future military environment?
- How will this environment influence leadership?

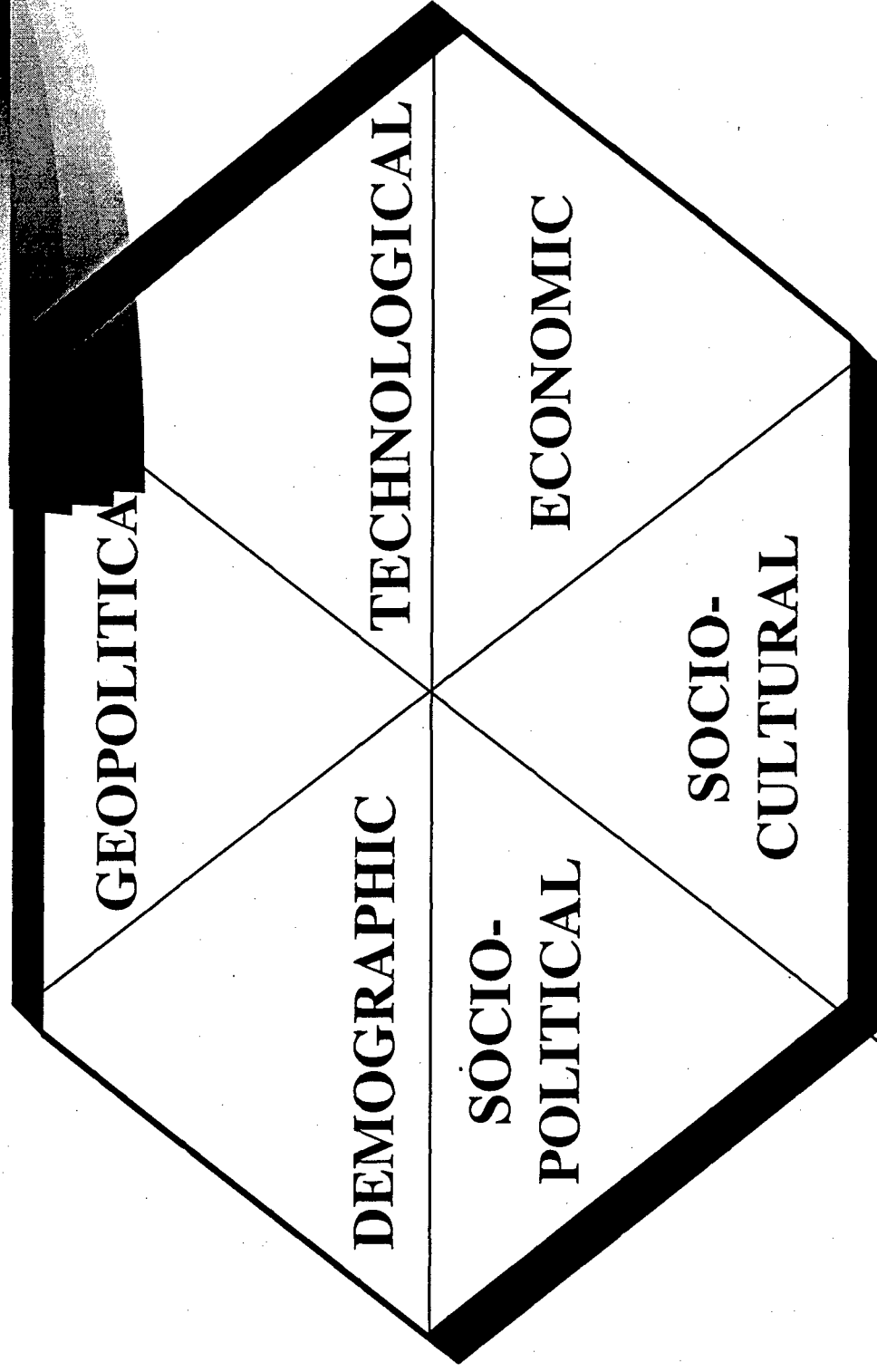
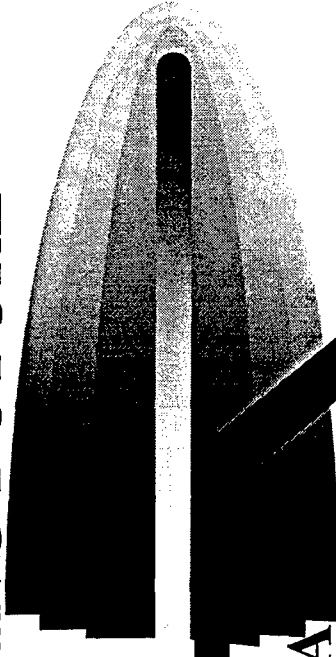
CONCEPTUAL FRAMEWORK FOR ORGANIZING LEADERSHIP REQUIREMENTS



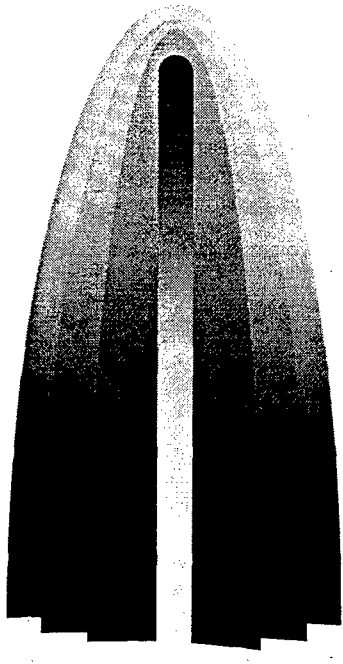
ENVIRONMENT



FRAMEWORK FOR ORGANIZING FUTURE ARMY ENVIRONMENT

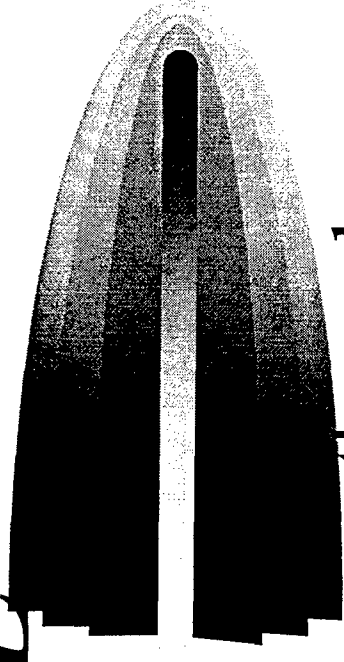


THE CHANGING U.S. ARMY ENVIRONMENT



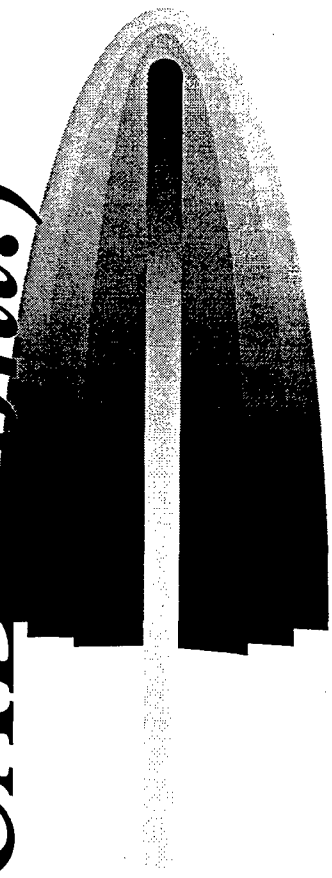
- GEOPOLITICAL
- TECHNOLOGICAL
- ECONOMIC
- SOCIO-CULTURAL
- SOCIO-POLITICAL
- DEMOGRAPHIC

GEOPOLITICAL



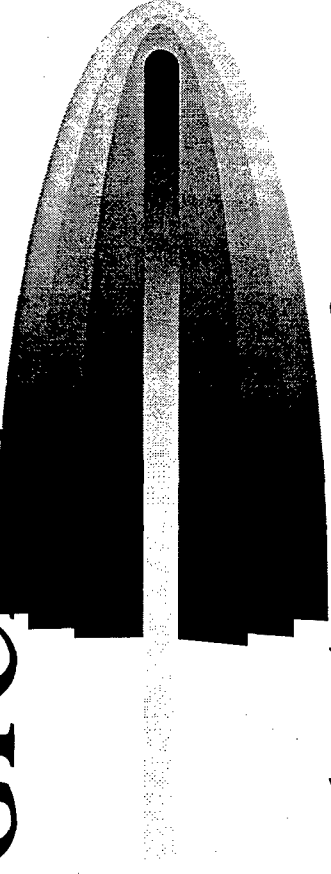
- Continued US military dominance through power projection and overseas presence
- Greater range of contingency operations requiring ability to rapidly assemble, deploy, and employ a force with required mix of capabilities
- High operations and personnel tempo
- Joint, Multinational Operations

GEOPOLITICAL (cont.)



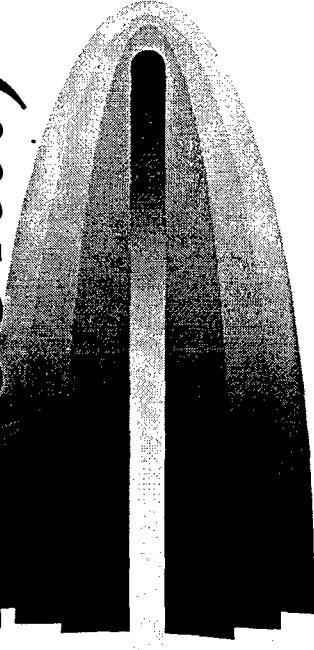
- Continued involvement in international arena
 - Peacemaking
 - Peacekeeping
 - Operations Other Than War (OOTW)
 - Humanitarian assistance
 - Noncombatant evacuation requirements
 - Terrorism
 - Drugs and arms trafficking
 - Environmental security

TECHNOLOGICAL



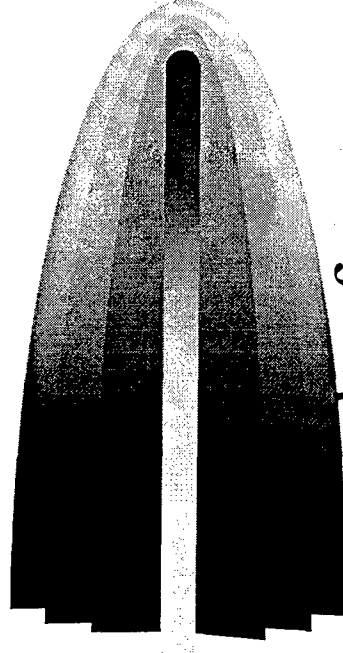
- Increased focus on technology as a force multiplier
 - Lethality with smaller force requirements
 - Less collateral damage, lopsided casualties
 - Around-the-clock operations
 - Technology ignorance by senior leaders
 - Increase use of private contractor support

TECHNOLOGICAL (cont.)



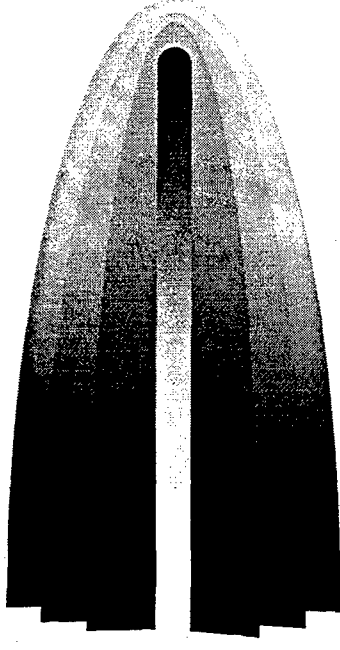
- Increased reliance on information technology
 - Shared real-time situational awareness
 - Exchange information horizontally and vertically
 - Ability to command anywhere in the battle space

ECONOMIC



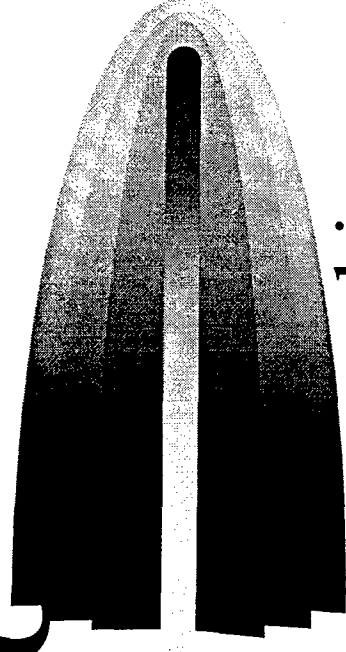
- Decreased military budget as a result of greater emphasis on domestic issues (e.g., health care system)
- Continued downsizing pressures
- Decrease in availability of officer candidates
- Decrease in retention of officer corps

SOCIOCULTURAL and SOCIOPOLITICAL



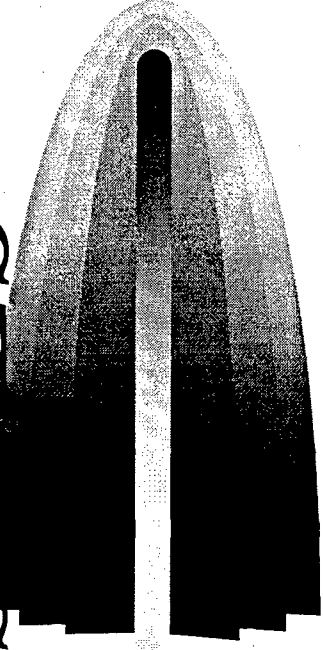
- Greater focus on public opinions and expectations by decision makers
- Instant media exposure
- Constant struggle to maximize public utility
- Requirement for military employment of disabled persons (response to ADA)
- Continued controversy of homosexuals in the military

DEMOGRAPHIC



- Army population will reflect demographic shifts in labor pool
- Military jobs will reflect continued movement towards gender equality
- HS graduates not as qualified to enter Army
- Continued decline in propensity to enlist
- Erosion of traditional values and ethical beliefs

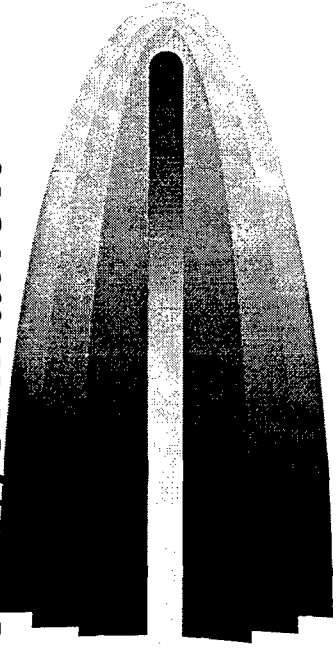
LEADERSHIP ISSUES



- Leader Performance Requirements
- Leader Attributes
- Leader Selection, Assessment, Retention,
and Promotion
- Leader Training and Development

IMPLICATIONS FOR LEADER PERFORMANCE

REQUIREMENTS: Knowledge & Information Management

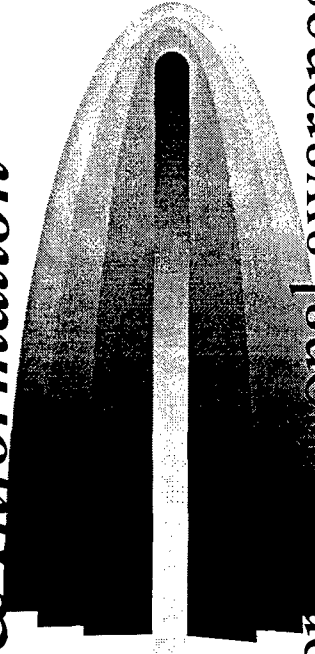


- Leaders will need to perform in new command and control climate/structure
 - Share data between different levels, functional areas and commands via distributed networks
 - Determine “fusion architecture”
 - Perform ill-defined tasks

IMPLICATIONS FOR LEADER PERFORMANCE

REQUIREMENTS: Knowledge & Information

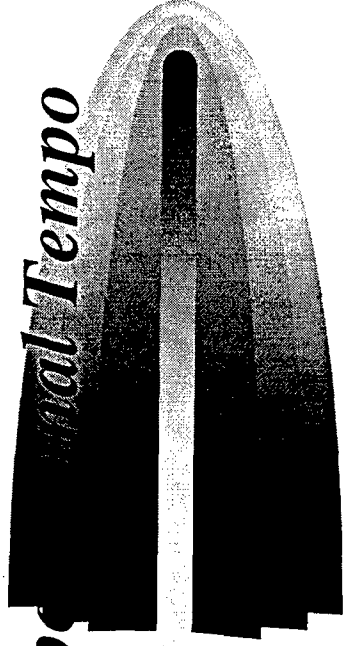
Management (cont.)



- Leaders will operate with greater operational awareness and a common picture of the battle field
- Leaders will need to manipulate public opinion and build consensus for risky ventures, overseas deployments, and OOTW
- Leaders will have to develop and sell vision to Congress and American people
- Leaders will need to cultivate relationships with business and industry for technological advancements

IMPLICATIONS FOR LEADER PERFORMANCE

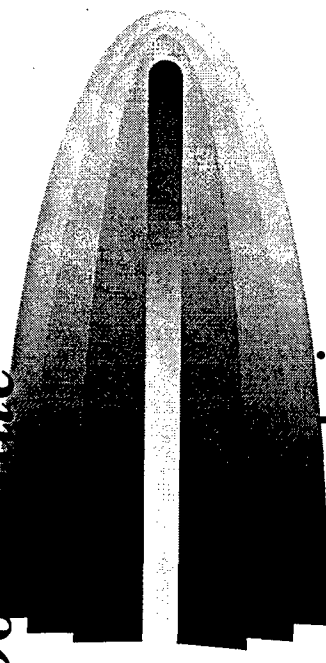
REQUIREMENTS: Speed & Operational Tempo



- Commander's will need to handle unanticipated threats worldwide on short-notice
- Commanders will need to make decisions at consistently faster rates

IMPLICATIONS FOR LEADER PERFORMANCE

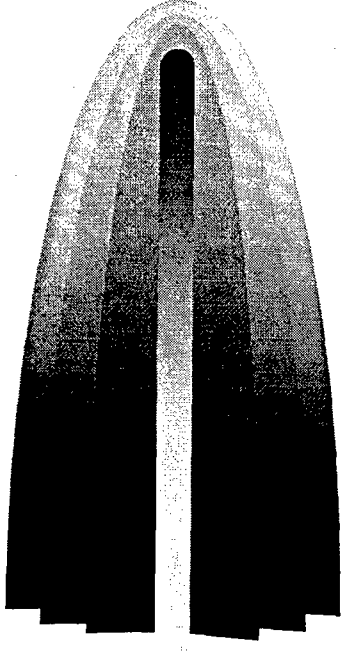
REQUIREMENTS: Team & Subordinate Development



- Leaders will need to lead and work in multicultural, multiracial and mixed-gender Army
- Leaders will need to integrate across components of Total Army
- Leaders will need to develop and maximize small unit effectiveness

IMPLICATIONS FOR LEADER ATTRIBUTES:

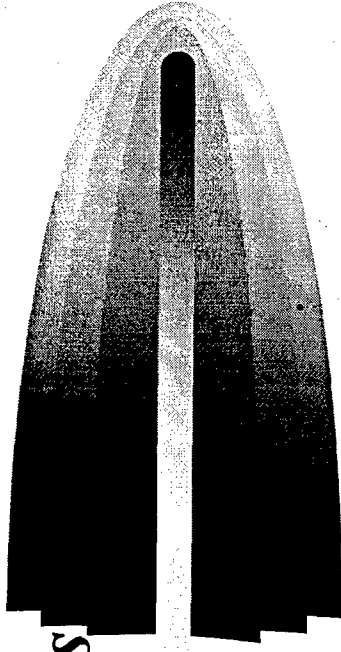
Knowledge



Leaders will need to know

- Historical local/social context
- Battlefield
 - Topographic and climatic realities
 - Restrictive ROE (rules of engagement)
 - Political (local, regional, global) climate
 - Economic and budgetary factors
 - Weapon and information technology

IMPLICATIONS FOR LEADER ATTRIBUTES: Skills, Competencies, & Abilities

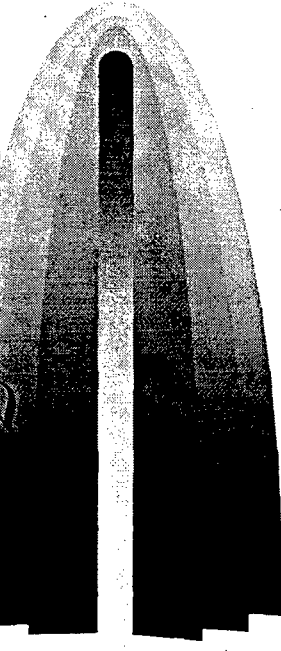


Leaders will need:

- Increased human relations & multicultural skills
- Advanced communication skills
- Team building and trust building skills
- Team boundary spanning skills
- Conflict resolution skills
- Cognitive skills
- Cognitive and behavioral flexibility
- Situational awareness skills

IMPLICATIONS FOR LEADER ATTRIBUTES:

Personality Attributes & Motivational Qualities



Leaders will need:

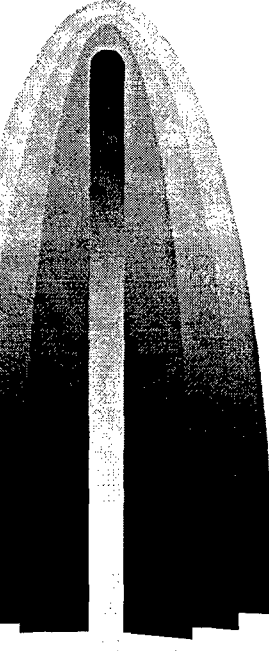
- Initiative
- Risk taking
 - take calculated risk
 - exploit opportunities
- Strong moral and ethical principles
- Tolerance for ambiguity
- Openness

IMPLICATIONS FOR LEADER SELECTION, ASSESSMENT, RETENTION, & PROMOTION



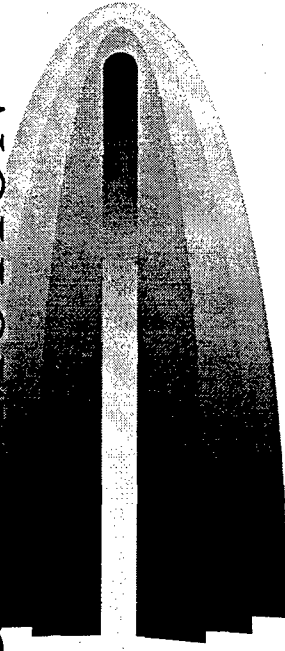
- Update programs to recruit & commission quality people
 - Increase role of universities in providing more broadly educated and diverse leaders
 - Increase public outreach
- Develop a “profile matching” approach to leader selection

IMPLICATIONS FOR LEADER SELECTION, ASSESSMENT, RETENTION, & PROMOTION



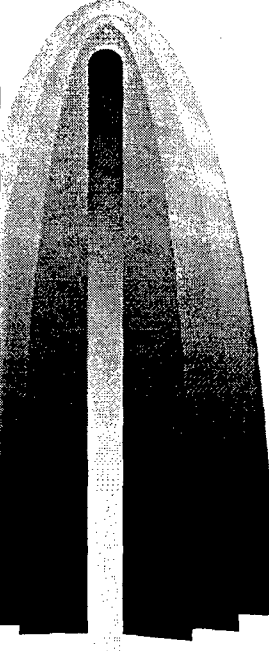
- Need for program to assess leader performance
 - Post Battalion level command assessment
 - Comprehensive analysis of leadership strengths and weaknesses of outgoing commander
 - 360 degree feedback
 - Modified SOF assessment process
 - Multiple hurdles screening for determination of follow-on assignments
 - Intensive situational and performance tests

IMPLICATIONS FOR LEADER SELECTION, ASSESSMENT, RETENTION, & PROMOTION



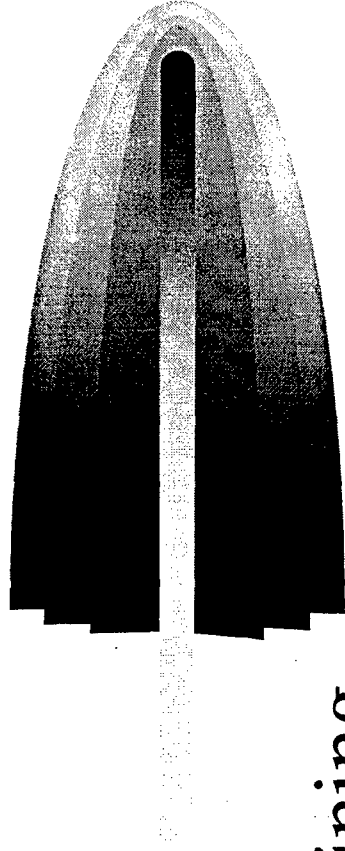
- Need programs to increase officer and enlisted retention

IMPLICATIONS FOR LEADER SELECTION, ASSESSMENT, RETENTION, & PROMOTION



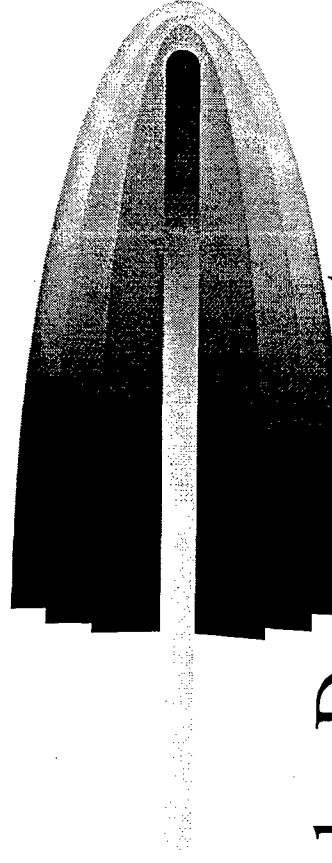
- Need to revise promotion system
 - to integrate Army HR management system
 - to balance grades and skills at Field Grade level
 - to provide broader base of information to field grade boards
 - to account for flattened structure and effects on promotion to General

IMPLICATIONS FOR LEADER TRAINING AND DEVELOPMENT



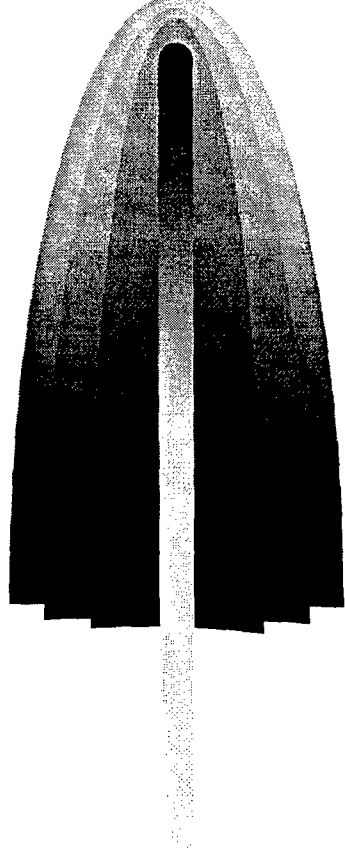
- Need for “catch-up” training
- Need for alternative training programs
 - Distance learning
 - Self-study
 - Mentorship and Feedback
 - Progressive assignments
 - Simulations
 - 3-D multi-sensory virtual experiences

IMPLICATIONS FOR LEADER TRAINING AND DEVELOPMENT



- Need to modernize Leader Development process
 - Emphasize combat training and subsidize with mission specific training
 - Cultivate experienced leaders
 - Improve core capabilities
 - Integrate with joint systems
 - Need to revolutionize “commander development” process (e.g., Commander MOS)
 - Train skills to employ new technology

IMPLICATIONS FOR LEADER TRAINING AND DEVELOPMENT



- Need to revise Joint Professional Military Education (JPME)
 - Focus on strategic thinking
 - Combined/Coalition warfare
 - Joint warfighting
 - Prepare leaders to interact with government, non-government, and private sector organizations